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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,051	08/19/2004	Trammell Hudson	040661.000002	9455
24239	7590	03/24/2005	EXAMINER	
MOORE & VAN ALLEN PLLC P.O. BOX 13706 Research Triangle Park, NC 27709			PHAN, DAO LINDA	
			ART UNIT	PAPER NUMBER
			3662	

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/711,051

Applicant(s)

HUDSON ET AL.

Examiner

Dao L. Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-14, 24-52 are rejected under 35 U.S.C. 102(b) as being anticipated by Linhart et al (Pat. No. 6,738,015) or Asher et al (Pat. No. 6,724,343).

Linhart et al teach a method and a system for providing improved accuracy of global positioning information including at least one sensor 12 to acquire global position measurement information, and means to improve accuracy of the global positioning measurement information using noise (CH 1, S+N) and error (Ch 1, Pseudorange Error Meas.) information associated with the global position measurement information.

Asher et al teach a method and a system for providing improved accuracy of global positioning information including at least one sensor (fig. 1) to acquire global position measurement information, and means to improve accuracy of the global positioning measurement information using noise (CLOCK & FREQUENCY ERROR ESTIMATES) and error (EPOCH PSEUDORANGE, DOPPLER, SNR ESTIMATES, COVARIANCE) information associated with the global position measurement information.

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3. Claims 1-52 are rejected under 35 U.S.C. 102(b) as being anticipated by Geier et al (Pat. No. 5,416,712).

Geier et al teach a method and a system for providing improved accuracy of global positioning information including at least one sensor 42, 16 to acquire global position measurement information, and means to improve accuracy of the global positioning measurement information using noise and error information (abstract, lines 4-7) associated with the global position measurement information.

With regard to claims 15-23, Geier et al teach a system for providing improved accuracy of global positioning information to control operation of a vehicle including a system 16, 42, 44 for providing global positioning information, an attitude and heading reference system 48, and a controller 60, 24 to receive data from the AHRS and the system for providing global positioning information to control operation of the vehicle.

4. Claims 15-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Lin (US 2002/0116125).

Lin teaches a system for providing improved accuracy of global positioning information to control operation of a vehicle including a system 80 for providing global positioning information, an attitude and heading reference system 70, and a controller 53 to receive data from the AHRS and the system for providing global positioning information to control operation of the vehicle.

5. Claims 15-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Lin et al (Pat. No. 6,596,976).

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Lin et al teaches a system for providing improved accuracy of global positioning information to control operation of a vehicle including a system (5; col 33, lines 27-29) for providing global positioning information, an attitude and heading reference system 5, and a controller 7 to receive data from the AHRS and the system for providing global positioning information to control operation of the vehicle.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dao L. Phan whose telephone number is (703)306-4167. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tarcza Thomas can be reached on (703)306-4171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


DAO PHAN
PATENT EXAMINER